



MEMO

To: Construction Subcommittee
From: Madeleine Weil, Environment Northeast
Date: From 8/25/05 email sent to subcommittee members
Re: CARB In-Use, Off-Road Equipment Measure (Proposed)

The California Air Resources Board is currently developing a regulation for “in-use” construction engines. They are still in relatively early stages of information gathering and policy design (the regulation will not be submitted to the Board in mid-2006). However, it is an interesting case study – as far as I know they are the only U.S. state to be developing a fleet-wide clean-up mandate for off-road equipment (as opposed to mandated bid specifications for public contracts, ala New York).

The best summary I can find of the current status of the off-road equipment measure is at: http://www.arb.ca.gov/msprog/ordiesel/presentations/workshop_presentation07_13.pdf
This is a presentation CARB staff developed for public workshops in July.

Highlights of the CARB Off-Road Equipment Measure info-gathering process and regulatory concept:

- Data gathering:
 - o 2003 Public Fleet Survey and 2005 Off-Road Equipment Survey
 - o CARB surveying 65,000 licensed contractors and all public entities (including state, county, city, water & irrigation districts, utilities)
 - o Data requested: fleet sizes, equipment types, hp ranges, owned vs. rented, frequency of rebuild, age of engine equipment when purchased, emission controls used and funding received
- Field Investigations:
 - o Studies of/by construction companies, retrofit manufacturers, equipment dealers, rental agencies, demonstration projects
- Proposed Regulatory Objectives:
 - o “Primary: reduce diesel PM emissions from off-road equipment as much as technically and economically feasible in short- and long-term.
 - o “Secondary: reduce NOx emissions.”

- Proposed Reporting Requirement:
 - o Due mid-2007 for all off-road mobile diesel equipment over 25 hp: owner contact info, equipment and engine details, emission control system, fuel used, operation information
 - o Annual demonstration of compliance required
- Proposed Regulatory Concept (Newly Purchased/Leased Equipment \geq 175 hp)
 - o Meet final Tier 4 off-road PM standard or have the highest level Verified Diesel Emission Control System (VDECS) available on each engine at time of purchase
- Proposed Regulatory Concept (Existing Equipment)
 - o This gets a bit complicated, but it basically amounts to a BAT requirement similar to NYC's. Follow link above for details.
 - BAT compliance phased in between now and 2013
 - By 2015, all equipment required to meet Tier 4 PM standards, or install at least Level 2 VDECS ($>50\%$ PM reduction).
- Compliance Flexibility
 - o Allowances made for experimental diesel PM control strategies, engines near retirement, low-use engines, etc.